

# TEXAS DEPARTMENT OF INSURANCE

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## PRODUCT EVALUATION DR-169

Effective July 1, 2011

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **November 2014**.*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.*

**Aluminum Clad Wood Outswing Doors, Non-impact Resistant**, manufactured by

**Lincoln Wood Products, Inc.**  
**1400 W. Taylor Street**  
**Merrill, Wisconsin 54452**  
**(715) 536-2461**

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

## PRODUCT DESCRIPTION

The aluminum clad wood outswing doors evaluated in this report are non-impact resistant. This product evaluation report is for aluminum clad wood outswing doors based on the following tested constructions:

### General Description:

System	Description	Label Rating
1	Aluminum Clad Wood Outswing Door; 3-0 x 8-0; X	HGD-LC50 38 x 96
2	Aluminum Clad Wood Outswing Door; 3-0 x 9-0; X	HGD-LC45 38 x 108

### Component Dimensions:

System	Overall Size	Panel Sizes	Daylight Opening Sizes
1	37 $\frac{3}{8}$ " x 95 $\frac{1}{2}$ "	36 $\frac{1}{2}$ " x 93 $\frac{1}{4}$ "	26 $\frac{1}{8}$ " x 81 $\frac{3}{16}$ "
2	37 $\frac{3}{8}$ " x 107 $\frac{1}{2}$ "	35 $\frac{13}{16}$ " x 105 $\frac{1}{4}$ "	26 $\frac{1}{8}$ " x 93 $\frac{3}{16}$ "

### Glazing Description:

System	Glass Construction <sup>1</sup>	Glazing Method <sup>2</sup>
1	IG-1	GM-1
2	IG-2	GM-1

Note: <sup>1</sup> See the "Glass Construction Key" for the glass construction.

<sup>2</sup> See the "Glazing Method Key" for the glazing method description.

**Glass Construction Key:**

- IG-1: Sealed insulating glass units. The sealed insulating glass units are comprised of two double strength ( $\frac{1}{8}$ " ) fully tempered glass lites separated by a vinyl spacer system. The thickness of the glass in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.
- IG-2: Sealed insulating glass units. The sealed insulating glass units are comprised of two  $\frac{5}{32}$ " fully tempered glass lites separated by an aluminum spacer system. The thickness of the glass in the insulating glass units of the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

**Glazing Method Key:**

- GM-1: The insulated glass units are set from the interior onto a bed of silicone sealant. A wood glazing stops secures the insulating glass units from the interior. The wood stops are secured to the frame with brads spaced 6 inches to 8 inches on center.

**Frame Construction:** The frame members at the head and jambs consist of finger-jointed pine. The frame corners are square cut, rabbeted, sealed, and secured with screws. **Sill:** The sill utilizes a three part assembly. The wood sill member utilizes an extruded aluminum sill which is secured with staples. The wood sill threshold is sealed with silicone and secured to the wood frame sill with screws. The sill is assembled at Lincoln Wood Products.

**Aluminum Cladding:** The exterior extruded aluminum cladding is mitered at the head and square cut at the sill. The cladding at the head is foam gasket applied and utilizes one screw per corner. The cladding utilizes foam gasket, silicone sealant at the corners and is snap-fit onto the wood frame members. The aluminum sill cladding is sealed with silicone and is snap-fit to the wood members.

**Panel Construction:** The panel members consist of veneer wrapped LVL members at the stiles and molded pine at the rails. The panel corners are square cut, glued, and doweled construction.

**Aluminum Cladding:** The extruded aluminum cladding is square cut, gasket applied, snap-fit and secured with staples to the wood panel members.

**Hardware:**

**Hinges:** Each door has four (4) adjustable hinges. The hinges are secured to the door frames with three (3) No. 10 x  $\frac{3}{4}$ " screws and one (1) No. 10 x 2  $\frac{1}{2}$ " screw. Note: The No. 10 x 2  $\frac{1}{2}$ " screw is used to secure the door frame to the wall framing. The hinges are secured to the door panels with four (4) No. 8 x 1  $\frac{1}{4}$ " screws.

**3-point lock with deadbolt/strike plates (System 1):** Located on the active panel stile. The strike plates are secured to the door with No. 8 x  $\frac{3}{4}$ " screws. Two (2) screws required at the top and bottom strike plates. Three (3) screws are required center strike plate. Two (2) No. 8 x 2  $\frac{1}{2}$ " screws are required to secure the latch strike plate to the wall framing.

**5-point lock with deadbolt/strike plates (System 2):** Located on the active panel stile with shoot bolts located at the top and bottom of the panel. The strike plates at the top and bottom are secured with one (1) No. 8 x  $\frac{3}{4}$ " screw and one (1) No. 8 x 2  $\frac{1}{2}$ " screw. The center strike plate requires two (2) No. 8 x  $\frac{3}{4}$ " screws and one (1) No. 8 x 2  $\frac{1}{2}$ " screw. Two (2) No. 8 x 2  $\frac{1}{2}$ " screws are required to secure the latch strike plate to the wall framing. Shoot bolt strike plates are secured to the head and to the sill with two (2) No. 8 x 2  $\frac{1}{2}$ " screws.

**Handle set:** Located on the active panel lock stile, 36" from the bottom rail.

**Product Identification:** A certification program label (AAMA) will be affixed to the assembly. The certification program label includes the manufacturer's code name (**LN-1**); product name: **clad outswing door**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/NWWDA 101/I.S.2-97.

### LIMITATIONS

**Design pressures (DP):**

System	Overall Width (in.)	Overall Height (in.)	Design Pressure (psf)
1	37 $\frac{3}{8}$	95 $\frac{1}{2}$	± 50
2	37 $\frac{3}{8}$	107 $\frac{1}{2}$	± 45

**Impact Resistance:** These door assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These door assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

**Acceptance of Smaller Assemblies:** Door assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

### INSTALLATION INSTRUCTIONS

**General:** The door assembly shall be prepared and installed in accordance with the manufacturers recommended installation instructions and this evaluation report. Detailed installation instructions and drawings are available from the manufacturer.

**Installation:** The wall framing shall be minimum Southern Yellow Pine dimension lumber. The door assembly shall be secured to the wall framing using the applied nailing flange at the head and side jambs with minimum 12 gauge roofing nails (minimum 2" long smooth shank). The fasteners shall be spaced approximately 7 inches from each corner and approximately 7 inches on center. The fasteners shall be long enough to penetrate a minimum of 1  $\frac{1}{2}$  inches into the wall framing. The sill is secured to the framing with silicone sealant.

**Note:** The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.